CLAIMS

What is claimed is:

1. A method for analyzing and debugging natural language parses, comprising the steps of:

displaying a parse tree for a sentence comprising at least one connecting point having two children;

receiving control input selecting one of said connecting points as a selected connecting point;

determining whether a constituent was formed at said selected connecting point; and

in response to determining that a constituent was formed at said selected connecting point, displaying a plurality of menu items proximate to said selected connecting point.

2. The method of claim 1, further comprising the steps of:

receiving control input selecting one of said plurality of menu items for deleting said constituent formed at said selected connecting point; and

in response to receiving said control input for deleting said constituent, deleting said constituent.

3. The method of claim 2, further comprising the steps of:

receiving control input selecting one of said plurality of menu items for deleting said parse tree; and

in response to receiving said control input for deleting said parse tree, deleting constituents formed at each connecting point in said parse tree.

4. The method of claim 3, further comprising the steps of:

receiving control input selecting one of said plurality of menu items for displaying information regarding said children of said selected connecting point; and

displaying information regarding said children of said selected connecting point.

5. The method of claim 4 wherein said step of displaying a first plurality of menu items further comprises displaying information identifying a grammar rule applied at said selected connecting point to form said constituent.

6. The method of claim 1, wherein said control input selecting one of said connecting points as a selected connecting point comprises:

receiving input from an input device placing a pointer of a user interface proximate to one of said connecting points; and

receiving input representing an enabled state for the control of the input device.

7. A computer-readable medium having computer-executable instructions for performing the steps recited in claim 1.

8. A computer-controlled apparatus for implementing the method of claim 1.

9. The method of claim 1, wherein said step of determining whether a constituent was formed at said selected connecting point comprises determining whether a rule was successfully applied at said selected connecting point to form a constituent between said children of said selected connecting point.

10. A method for analyzing and debugging natural language parses, comprising the steps of:

displaying a parse tree for a sentence comprising at least one connecting point having two children;

receiving control input selecting one of said connecting points as a selected connecting point;

determining whether a constituent was successfully formed at said selected connecting point; and

in response to determining that a constituent was not successfully formed at said selected connecting point, displaying a first plurality of menu items proximate to said selected connecting point.

11. The method of claim 10, further comprising the steps of:

receiving control input selecting one of said first plurality of menu items for displaying a group of rules applied to successfully form a constituent at said selected connecting point; and

in response to receiving user input selecting said menu item for displaying rules applied to successfully form a constituent at said selected connecting point, displaying a second plurality of menu items proximate to said first plurality of menu items.

12. The method of claim 11 wherein said children comprise constituents of said selected connection point, and further comprising the steps of:

receiving control input selecting one of said second plurality of menu items for displaying a group of rules that may be applied at said selected connecting point in view of said constituents of said selected connecting point; and

displaying a first group of rules comprising all of the rules that may be applied at said selected connecting point in view of said constituents of said selected connecting point.

13. The method of claim 11 wherein said children comprise constituents of said selected connecting point, and further comprising the steps of:

receiving control input selecting one of said second plurality of menu items for displaying a group of rules that may be applied at said selected connecting point without regard to said constituents of said selected connecting point; and

displaying a second group of rules comprising all of the rules that may be applied at said selected connecting point without regard to said constituents of said selected connecting point.

14. The method of claim 13, further comprising the steps of:

receiving control input selecting a rule from one of said first or second groups of rules as a selected rule; and

applying said selected rule at said selected connecting point and updating said parse tree.

15. A computer-readable medium having computer-executable instructions for performing the steps recited in claim 14.

16. A computer-controlled apparatus for implementing the method of claim 14.

17. The method of claim 11, further comprising the steps of:

receiving control input selecting one of said first plurality of menu items for displaying a group of rules applied at said selected connecting point that did not successfully form a constituent at said selected connecting point; and

in response to receiving user input selecting said menu item for displaying rules unsuccessfully applied at said selected connecting point, displaying a list of rules that were unsuccessfully applied at said selected connecting point.

18. The method of claim 11, further comprising the steps of:

receiving control input selecting one of said first plurality of menu items for displaying a group of rules not applied at said selected connecting point; and

in response to receiving user input selecting said menu item for displaying rules not applied at said selected connecting point, displaying a list of rules that were not applied at said selected connecting point.

19. The method of claim 18, further comprising the steps of:

receiving control input selecting a rule from one of said displayed list of rules as a selected rule;

receiving control input indicating that said selected rule should be applied at said selected connecting point to form a constituent; and

applying said selected rule at said selected connecting point.

20. The method of claim 19, further comprising the steps of:

determining whether said application of said selected rule at said selected connecting point was successful; and

in response to determining that said application of said selected rule was unsuccessful, displaying information identifying the reasons for the failure of said application of said selected rule.

21. The method of claim 18, further comprising the steps of:

receiving control input selecting requesting the computation of the success or failure of each of said displayed list of rules;

in response to said receiving control input requesting the computation of the success or failure of each of said displayed list of rules, transmitting each rule in said displayed list of rules to a parsing engine;

retrieving an associated success or failure indicator for each of said rules in said displayed list of rules from said parsing engine; and

displaying said success or failure indicators.

22. A computer-readable medium having computer-executable instructions for performing the steps recited in claim 21.

23. A computer-controlled apparatus for implementing the method of claim 21.

24. A method for analyzing and debugging natural language parses, comprising the steps of:

displaying a parse tree for a sentence comprising at least one connecting point having two children;

receiving control input selecting a new parse of said sentence; and

in response to receiving said control input, displaying said new parse of said sentence as a new parse tree.

25. The method of claim 24, wherein said new parse comprises a previous parse of said sentence.

26. The method of claim 24, wherein said new parse comprises a next parse of said sentence.

27. A computer-readable medium having computer-executable instructions for performing the steps recited in claim 26.

28. A computer-controlled apparatus for implementing the method of claim 26.

29. A method for analyzing and debugging natural language parses, comprising the steps of:

displaying a parse tree for a sentence comprising at least one connecting point having two children;

receiving control input selecting a new sentence to be parsed; and

in response to receiving said control input, transmitting said new sentence to a parsing engine;

receiving a parse of said new sentence from said parsing engine; and

displaying said new parse of said new sentence as a new parse tree.

30. The method of claim 29, wherein said new sentence comprises a previous sentence.

31. The method of claim 29, wherein said new sentence comprises a next sentence.